

REMARKS/ARGUMENTS

Claims 1-23 are pending in this application. Claims 1, 5, 11 and 13-21 have been currently amended. Claims 1, 11, and 14-16 are independent claims. Support for the amendment may be found throughout the specification and drawings.

Specification

Per the Patent Office's instruction, Applicants have amended the paragraph [0001] of the Patent Application to supply the relevant PTO serial numbers on Page 3 of this paper.

Claim Objections

Per the Patent Office's instruction, Applicants have amended the Claims 19-21 to provide proper claim antecedent basis.

Claim Rejections – 35 USC § 102

Claims 1-13, 16-21 and 23 were rejected under 35 U.S.C. § 102(e) as being anticipated by Matsuzawa et al. ("Matsuzawa", U.S. Patent Number 6,505,329). Applicants respectfully traverse these rejections. However, independent Claims 1, 11 and 16 have been currently amended.

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *W.L. Gore & Assocs. v. Garlock*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Further, "anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added).

Independent Claims 1, 11 and 16, as amended, each recite an element of data being "optimized based on at least one of bandwidth, latency, scalability, and isochronous interconnect configuration". In rejecting the original Claims 1, 11 and 16, the Patent Office has relied on col 3, lines 52-67; col. 4, lines 1-31; col. 5, lines 42-67; and col. 6, lines 1-63 of Matsuzawa for teaching the above-indicated element. (Office Action, Page 3, Lines 5-8). Applicants respectfully disagree.

Col 3, lines 52-67 and col. 4, lines 1-31 of Matsuzawa are the SUMMARY OF THE INVENTION, which discloses a method of laying out hard macros on a semiconductor chip, in conformity with the location of address-fixed pads.

Col. 5, lines 42-67 and col. 6, lines 1-63 of Matsuzawa describe FIG. 3 of Matsuzawa, which illustrates the functional structure of the designing apparatus. Nowhere is the element of data being "optimized based on at least one of bandwidth, latency, scalability, and isochronous interconnect configuration" taught, disclosed, or suggested in these parts of Matsuzawa.

As a matter of fact, Applicants have performed diligent search and was not able to find a single word of "bandwidth", "latency", "scalability", or "isochronous interconnect" in Matsuzawa.

Thus, Matsuzawa fails to teach, disclose, or suggest the element of data being "optimized based on at least one of bandwidth, latency, scalability, and isochronous interconnect configuration" as claimed in Claims 1, 11 and 16. Therefore, the rejections should be withdrawn, and Claims 1, 11 and 16 should be allowed.

Claims 2-10 depend from Claim 1 and are therefore allowable due to their dependence upon Claim 1. Claims 12-13 depend from Claim 11 and are therefore allowable due to their dependence upon Claim 11. Claims 17-21 and 23 depend from Claim 16 and are therefore allowable due to their dependence upon Claim 16.

Claim Rejections – 35 USC § 103(a)

Claim 22 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzawa in view of Boyle et al. ("Boyle", U.S. Patent Number 6,557,145). Applicants respectfully traverse this rejection.

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." (emphasis added) (MPEP § 2143). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. (emphasis added) *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

As indicated in the foregoing *Claim Rejections – 35 USC § 102* section, Matsuzawa fails to teach, disclose, or suggest the element of data being “optimized based on at least one of bandwidth, latency, scalability, and isochronous interconnect configuration” as claimed in Claims 16. Furthermore, Boyle fails to teach, disclose, or suggest the above-indicated claim element. Thus, independent Claims 16 are nonobvious under 35 U.S.C. § 103.

Claims 22 depend from Claim 16 and are therefore nonobvious due to their dependence upon Claim 16. Thus, the rejection should be withdrawn, and Claim 22 should be allowed.

Allowable Subject Matter

The Patent Office has acknowledged that original Claims 14-15 are directed to allowable subject matter and has indicated that original Claims 14-15 “would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims” (Office Action, Pages 5-6). Applicants have rewritten those claims in independent form including all of the limitations of the base claim and any intervening claims in accordance with the Patent Office’s instruction, and have also corrected formal matters. Thus, Claims 14-15 should be allowed.

CONCLUSION

In light of the foregoing, Applicants respectfully request that a timely Notice of Allowance be issued in the case.

Respectfully submitted on behalf of
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Dated: August 4, 2003

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